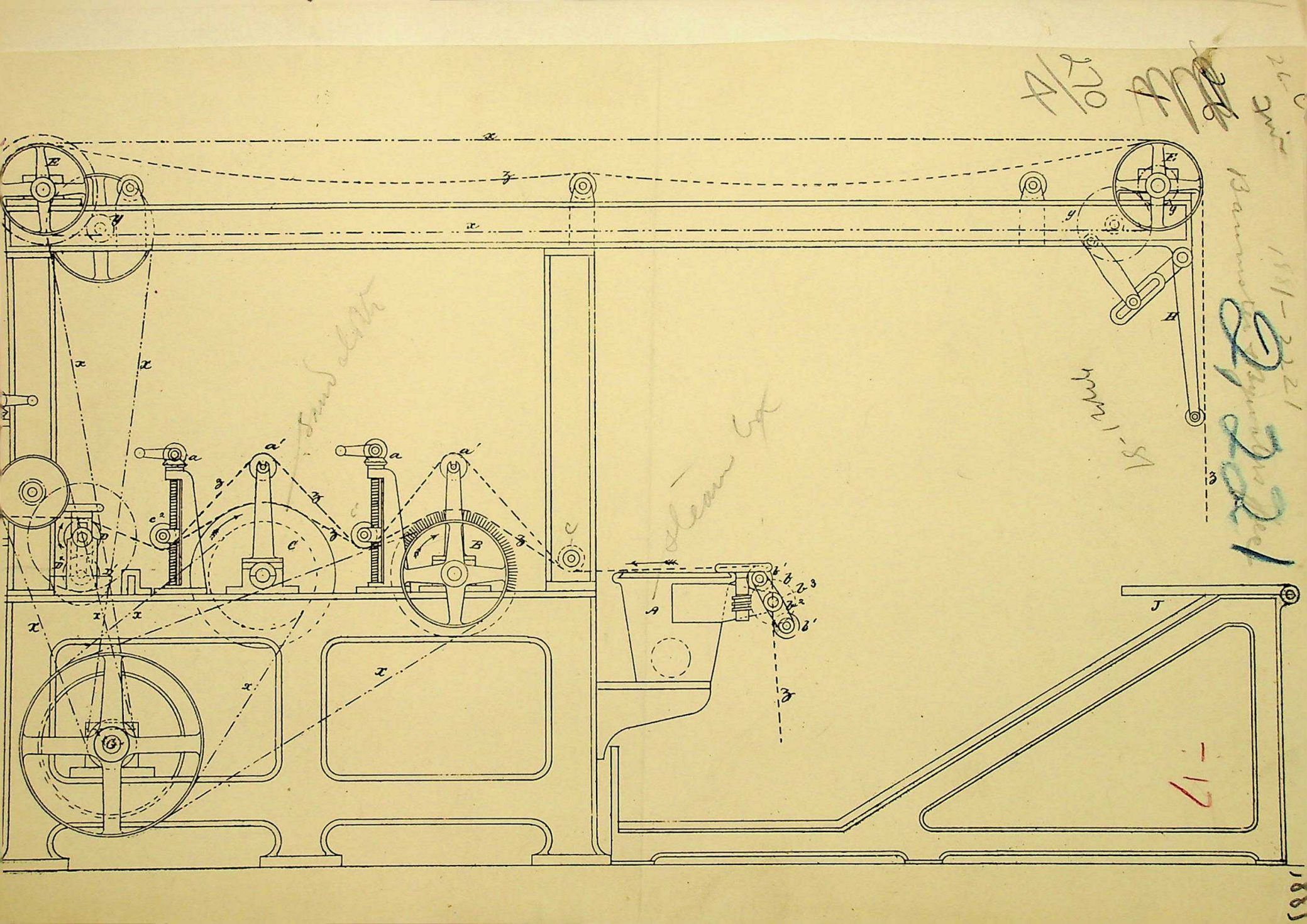
x
y
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J
H

A.D. 1881, 21*st* MAY. N° 2221.

Dressing and Finishing Woollen or Worsted Fabrics.

LETTERS PATENT to John William Bannister, of the Britannia Mills, Leeds, in the County of York, and William Bywater, of the Sweet Street Foundry, in the said Leeds, for an Invention of "IMPROVEMENTS IN MEANS OR APPARATUS FOR DRESSING AND FINISHING WOOLLEN OR WORSTED FABRICS."

PROVISIONAL SPECIFICATION left by the said John William Bannister and William Bywater at the Office of the Commissioners of Patents on the 21st May 1881.

JOHN WILLIAM BANNISTER, of the Britannia Mills, Leeds, in the County of York, and WILLIAM BYWATER, of the Sweet Street Foundry, in the said Leeds. "IMPROVEMENTS IN MEANS OR APPARATUS FOR DRESSING AND FINISHING WOOLLEN OR WORSTED FABRICS."

In carrying our improvements into effect the fabric to be operated upon is, when required, first conducted over a steaming box, or is otherwise steamed, thence it is conducted by rollers held so as to be capable of rocking in arms or in a frame acted upon so as to vary the tension on the fabric as required.

Thence the fabric is acted on by another guide roller or other guide rollers in its passage to a brushing roller, thence it passes to the surface of a sand or emery roller, and from the surface of the sand or emery roller to what is commonly called the "inking roller." Between these rollers the fabric is acted upon by adjustable pressure rollers. After leaving the "inking roller" the fabric is acted upon by another adjustable pressure roller, and thence by a series of cylinders or rollers the fabric is conducted to the cuttle or cuttle arms for effecting the desired folding of it.

Motions are given to the respective main operating rollers by bands or other gear from a main shaft operated by steam or other suitable power, and so that any of them may for a time be thrown out of operation by the attendant without interfering with the correct action of the other parts.

When the operation of any of such main operating rollers is suspended the fabric is passed over other guide roller or rollers to prevent contact with the main roller or rollers for the time out of operation.

By thus combining these separate operations greatly increased facility as well as economy of working may be realized.

[*Price 6d.*]

SPECIFICATION in pursuance of the conditions of the Letters Patent filed by the said John William Bannister and William Bywater in the Great Seal Patent Office on the 19th November 1881.

JOHN WILLIAM BANNISTER, of the Britannia Mills, Leeds, in the County of York, and WILLIAM BYWATER, of the Sweet Street Foundry, in the said Leeds. "IMPROVEMENTS IN MEANS OR APPARATUS FOR DRESSING AND FINISHING WOOLLEN OR WORSTED FABRICS."

In carrying our improvements into effect the fabric to be operated upon is, when required, first conducted over a steaming box, or is otherwise steamed, thence it is conducted by rollers held so as to be capable of rocking in arms or in a frame acted upon so as to vary the tension on the fabric as required.

Thence the fabric is acted on by another guide roller or other guide rollers in its passage to a brushing roller, thence it passes to the surface of the sand or emery roller, and from the surface of the sand or emery roller to what is commonly called the "inking roller." Between these rollers the fabric is acted upon by another adjustable pressure roller, and thence by a series of cylinders or rollers the fabric is conducted to the cuttle or cuttle arms for effecting the desired folding of it.

Motions are given to the respective main operating rollers by bands or other gear from a main shaft operated by steam or other suitable power, and so that any of them may for a time be thrown out of operation by the attendant without interfering with the correct action of the other parts.

When the operation of any of such main operating rollers is suspended the fabric is passed over other guide roller or rollers to prevent contact with the main roller or rollers for the time out of operation.

But that the Invention may be more fully understood we will, by the aid of the accompanying Drawing, proceed to describe means pursued by us in carrying the same into effect.

DESCRIPTION OF THE DRAWING.

The Drawing represents by outline a side view of an arrangement of apparatus according to our Invention.

A represents a steaming box or trough, which may be of the ordinary character; b is the ordinary brake formed of rollers b^1 supported in the frame b^2, which is capable of being rocked on its axis b^3 so as to vary the tension as required on the fabric under operation.

The fabric under operation, as indicated by the dotted line z, passes from the steaming box or trough A under a roller c to the surface of a brushing roller B, thence it passes under the guide roller c^1, and when desired in contact with the surface of the sand cloth roller C, and thence under the guide roller c^2. But if it is not required for the cloth to be acted upon by the rollers B or C it may be conducted over either or both of the guide rollers a^1, a^1. From the roller c^2 the fabric is conducted to the inking roller D, which is supplied from the inking trough D^1 by means of the intermediate roller D^2. The intermediate rollers c^1, c^2, and also the further guiding roller c^3 are supported so that the pressure they exert may be varied by the action thereon of the screws a, a. The fabric under operation thence passes from the adjustable pressure roller c^3 over the cylinders or rollers E, E, to the cuttle H for the folding of the fabric on the scray or table J. G is the driving shaft.

Motions are given to the respective main operating rollers by bands or straps and gear as indicated by the dotted lines x, y.

Having thus described our Invention, and means which we adopt in carrying the same into effect, we would have it understood that what we claim is the

arranging or combining parts forming means or apparatus for dressing and finishing woollen or worsted fabrics, whereby facility is afforded for the combined or separate operations in working therewith, substantially as described.

In witness whereof, we, the said John William Bannister and William Bywater, have hereunto set our hands and seals, this Seventeenth day of November, One thousand eight hundred and eighty one.

JOHN W. BANNISTER. (L.S.)
WILLIAM BYWATER. (L.S.)

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